NASA Weekly Update

Week of August 14-21, 2006

8-18: Countdown Begins Aug. 24 for Space Shuttle Atlantis Launch: NASA will begin the launch count-down for Space Shuttle Atlantis' STS-115 mission at 6 p.m. EDT Thursday, Aug. 24, at the T-43 hour point. During this mission, Atlantis' crew will resume construction of the International Space Station. The countdown includes 27 hours, 24 minutes of built-in

Spectators gather around the countdown clock as it counts down to the Space Shuttle's launch time.

hold time leading to a preferred launch time at about 4:30 p.m. on Sunday, Aug. 27. The launch window for that day extends an additional five minutes. This mission is the 116th space shuttle flight, the 27th flight for Atlantis and the 19th U.S. flight to the International Space Station. STS-115 is scheduled to last 11 days with a landing at Kennedy about 12:02 p.m. EDT on Sept. 7. For information about the STS-115 crew and its mission to the International Space Station, visit: http://www.nasa.gov/shuttle.

8-18: NASA Selects Crew and Cargo Transportation to Orbit Partners: NASA selected SpaceX, El Segundo, Calif. and Rocketplane-Kistler, Oklahoma City, to develop and demonstrate commercial orbital transportation services (COTS) that could open new markets and pave the way for contracts to launch and deliver crew and cargo to the International Space Station. COTS Phase 1 solicited proposals from industry for Earth-to-orbit space flight demonstrations. For more information about the program, visit: http://procurement.jsc.nasa.gov/cots.

8-18: NASA Air Traffic Management Tool Wins Software of the Year Award: The Future Air traffic management Concepts Evaluation Tool (FACET) was selected as NASA's 2006 Software of the Year. The FACET software is designed to help improve the safety and efficiency of the national airspace system and is being recognized for innovation and significant contributions to science and technology. The flexible software tool provides powerful simulation capabilities and can rapidly generate thousands of aircraft trajectories to enable efficient planning of traffic flow across the U.S. The software was developed at NASA's Ames Research Center, Moffett Field, Calif. For more information about FACET, visit: http://as.nasa.gov/aatt/facet.html. For information about the Software of the Year, visit: http://icb.nasa.gov/nasaswy.html.

8-17: Hubble Sees Faintest Stars in a Globular Cluster: NASA's Hubble Space Telescope has uncovered what astronomers are reporting as the dimmest stars ever seen in any globular star cluster. Globular clusters are spherical concentrations of hundreds of thousands of stars. These clusters formed early in the 13.7-billion-year-old universe. The cluster NGC 6397 is one of the closest globular star clusters to Earth. Seeing the whole range of stars in this area will yield insights into the age, origin and evolution of the cluster. For images and additional information about NGC 6397, visit: http://www.nasa.gov/hubble.

8-17: NASA Satellites Will Improve Understanding of the Sun: NASA's Solar Terrestrial Relations Observatory (STEREO) mission will dramatically improve understanding of the powerful solar eruptions that can send more than a billion tons of the sun's outer atmosphere hurtling into space. (cont. on page 2)

For more information about STEREO, visit: http://www.nasa.gov/stereo.

8-17: NASA Announces Briefings to Discuss Space Station Missions: NASA will hold two media briefings this week on the current and next missions to the International Space Station. The briefings will occur at 2 p.m. and 3 p.m. EDT Tuesday, Aug. 22, and will be broadcast live on NASA TV. For NASA TV streaming video, downlink and schedule information, visit: http://www.nasa.gov/ntv. For more information on the International Space Station, visit: http://www.nasa.gov/station.

8-16: NASA Gives 'Go' for Space Shuttle Atlantis' Launch: NASA senior managers on Wednesday unanimously voted to launch the Space Shuttle Atlantis on Aug. 27. Commander Brent Jett and his five crewmates are scheduled to lift off at 4:30 p.m. EDT on the STS-115 mission, which restarts construction of the International Space Station. For STS-115 crew and mission information, visit: http://www.nasa.gov/shuttle.

8-15: Delgado Named NASA's Small Business Assistant Administrator: NASA Deputy Administrator Shana Dale announced Tuesday Glenn A. Delgado has been appointed the assistant administrator for the Office of Small and Disadvantaged Business Utilization. Delgado comes to NASA from the U.S. Navy, where he was acting director of the Small Business Programs Office. He served as a procuring contracting officer on several major weapons' systems at the Naval Air Systems Command, where he began his federal career as a contract specialist.

8-11: NASA Sets Sights on the Next Generation of Explorers: NASA's Education Office has released a new framework to work with the academic community to prepare the next generation of explorers and innovators. The Education Strategic Coordination Framework highlights agency content, people and facilities as the foundation for sponsored educational opportunities, while developing new non-traditional partnerships. For a copy of the NASA Education Strategic Coordination Framework and information about agency education programs, visit: http://education.nasa.gov/about/strategy/index.html.

Weekly Status Reports

International Space Station (ISS)

The astronauts aboard the International Space Station spent much of their week preparing for the arrival of the Space Shuttle Atlantis, set for launch Aug. 27 on the STS-115 mission.

Commander Pavel Vinogradov, Flight Engineer and NASA Science Officer Jeff Williams and European Space Agency astronaut Thomas Reiter of Germany prepared for Atlantis to deliver a new section of the station's girder-like truss.

During the shuttle flight, Atlantis' crew members will perform three spacewalks to complete the installation and setup of the new segment. Complex robotics work is involved as the 17.5-ton, bus-sized truss section is handed from the shuttle arm to the station arm for installation.

The crew also did several physiological and psychological tests and experiments designed to learn more about how humans react to long periods of weightlessness.

Throughout the week Vinogradov and Reiter worked on the Russian-German Plasma Crystal experiment. The experiment examines the behavior of tiny particles excited by high-frequency radio signals in a vacuum chamber and functions by itself most of the time. It requires a crew member to work with it, however, at some intervals during the day.

The EarthKam experiment was activated this week. EarthKam allows students to request photos from space of specific locations on Earth via email and later receive those photos electronically.

Upcoming Events

- **Aug 22:** Space Station Missions Briefings at 2 p.m. and 3 p.m. EDT
- **NET Aug 27:** Space Shuttle Atlantis STS-115 mission
- **NET Aug 31:** STEREO launch

Please send *A Look at NASA* Newsletter to me.

Name _____ Address _____

Title _____ City _____

E-mail address (required) _____ State _____ Zip Code _____

Work Phone _____ Home Phone _____

Please print and Fax to (202) 358-4340
or e-mail Lisa.Gibson@nasa.gov